SERVICE MANUAL & PARTS LIST (without price)

LABEL PRINTER
KL-1500(ZX-556)

JUL. 1995

KL-1500

INDEX

CASIO®

CONTENTS

SPECIFICATIONS

Input

Keyboard layout :	Typewriter (QWERTY)

Character Types

Alpha (English and other languages) :	151
Numbers :	10
Symbols :	117
Illustrations :	50

Display

Type :	48 X 32-dot liquid crystal display
Number of columns :	8
Character matrix :	16 X 16-dot

Printing

Type :	64-dot thermal transfer
Speed :	Approximately 6.76 mm / second
Width :	4 mm (6 mm tape) or 8 mm (other tape)
Character matrix :	24 X 24-dot (normal) ; 16 X 16 dot(s)
Character fonts :	Serif, sans-serif
Character styles :	Normal, outline, shadow, raised
Character effects :	Underline, box
Character sizes :	1X1, 1X2, 1X3, 2X1, 2X2, 2X3, L2X3, S1X1, S1X2, S1X3, S2X1, S2X2, S2X3
Character pitch :	None (0 mm), narrow (0.5 mm), wide (1.0 mm)
Number of line :	1 or 2 (6 mm tape) ; 1 to 4 (other tapes)

Memory

Text :	Up to approximately 326 characters

General

Main power supply :	Six C-size batteries or optional AD-A95100 AC adaptor
Power consumption :	9 W
Auto power off :	Approximately six minutes after last key operation
Dimensions :	68.6H X 180.5W X 161.2mmD
Weight :	508.5g (1.1 lbs)(Including batteries)
Ambient temperature :	10 °C ~ 35 °C

Threshold of voltage detection

Low battery :	Vbat = 6.2V ± 2.5%
Forced power off :	Vbat = 5.0V ± 5.0%

Note : Vbat = power source (Batteries or AC adaptor)

CLEANING THE PRINTER HEAD AND ROLLER

1 : Make sure to turn the power switch off.
2 : Open the tape cartridge compartment cover.
3 : Remove the tape cartridge.
4 : Use a cotton swab dipped in alcohol to clean the printer head and roller.
5 : Replace the tape cartridge and close the compartment cover.

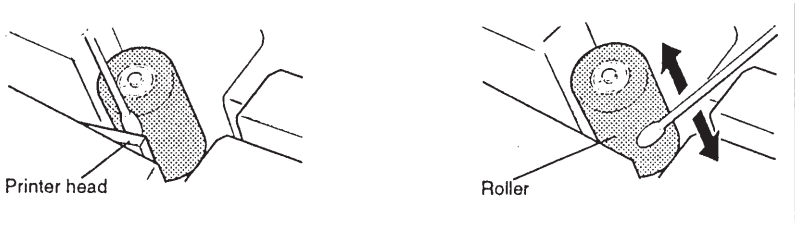


Figure-1

RESET OPERATION

If you experience serious malfunction of the unit or if operation fails completely, try performing the following operation to reset the unit.

1 : Turn the power switch off.
2 : Open the tape cartridge compartment cover and remove the tape cartridge.
3 : Press the reset switch inside the tape cartridge compartment to reset the unit.

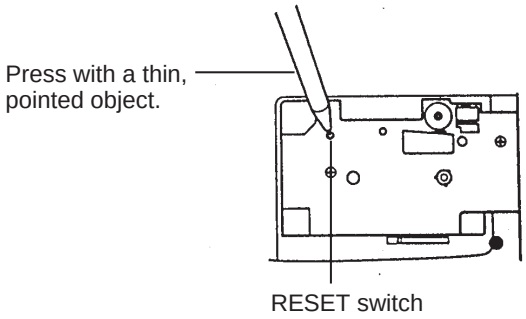


Figure-2

NOTE : 1. Take care not to press the RESET switch too hard with pointed object. Doing so can cause malfunction.
2. Never press the RESET switch expect when the unit fails to operate correctly.
3. Data stored in memory is not cleared when you press the RESET switch.

BLOCK DIAGRAM

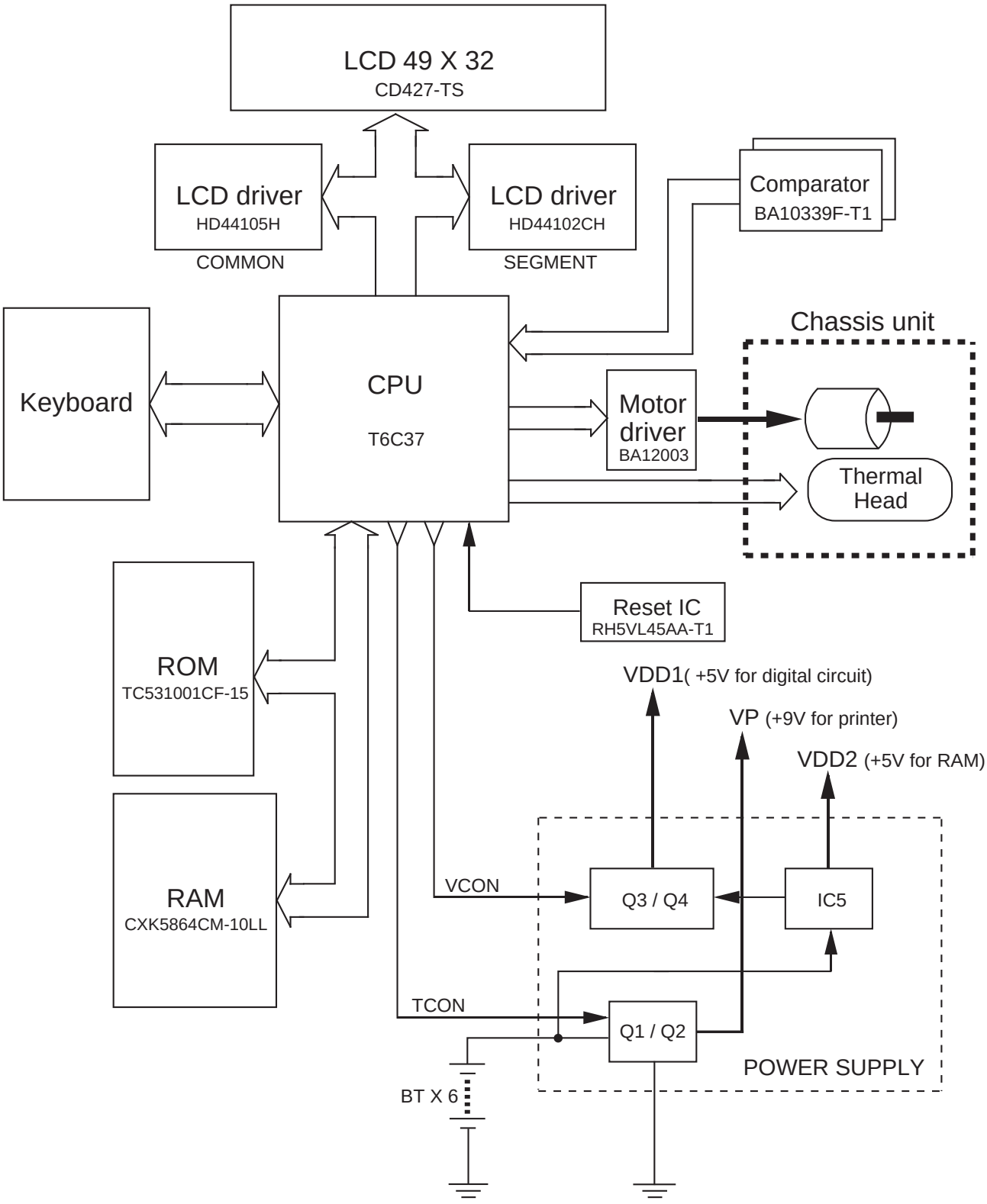


Figure-3

PRECAUTIONS

To prevent damage of the thermal head caused by static electricity when assembling the chassis ass'y into the unit, the following steps must be followed;

1 : Turn the power switch off.
2 : Discharge the capacitor C5(2200μF) on the PCB Z556-1.
3 : Connect the FPC of chassis ass'y into a connector CN4 of PCB Z556-1.
4 : Assemble the chassis ass'y.
5 : Turn the power switch on.

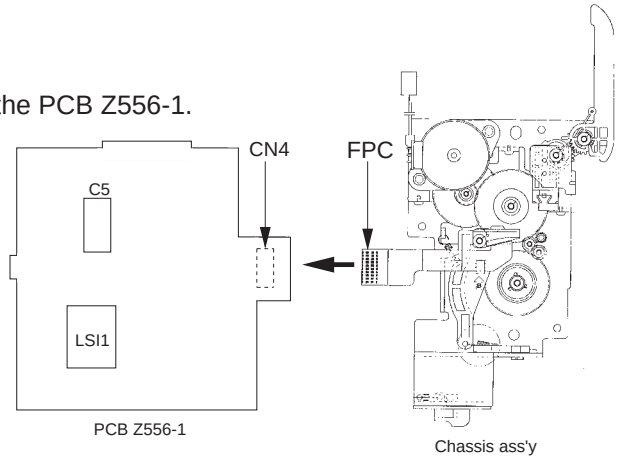


Figure-4

ADJUSTMENT

Adjustment of low battery detection circuit

To adjust the threshold voltage of the low battery detection circuit, the following steps must be followed;

1 : Apply 9V to the battery terminals.
2 : Press ON while holding down 3 keys SET, RETURN and FUNCTION. (Start Diagnostic Program)
3 : Press 7.(Apply the voltage Vp for printer)
4 : Apply the voltage with a power supply so that the voltage at the collector of Q1 is 6.2V+0.1 / -0V.
5 : Adjust a pot VR1 so that the voltage between pin-8 of IC4 and pin-5 of IC3 is 0 +/-0.01V.

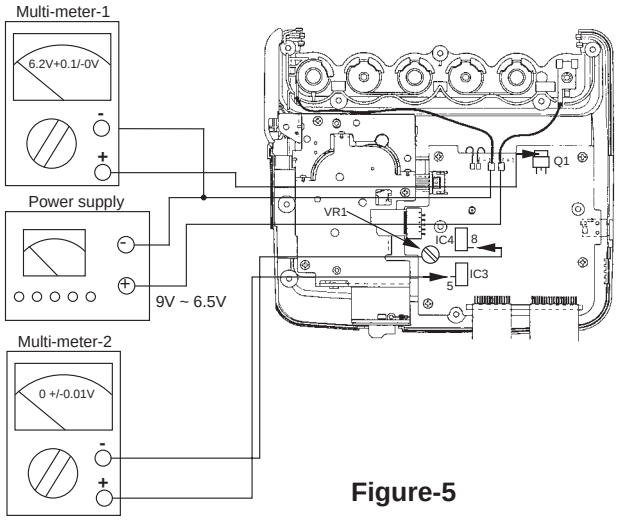


Figure-5

Setting the thermal head rank

Set the thermal head rank with pads RNK1 and RNK2 on the PCB L271-1 according to the following conditions when replacing the chassis ass'y or thermal head. The head rank is indicated on FPC as following figure-6.

Head rank A : RNK1=SHORT, RNK2=OPEN
Head rank B : RNK1=OPEN, RNK2=SHORT
Head rank C : RNK1=OPEN, RNK2=OPEN
Head rank D : RNK1=SHORT, RNK2=SHORT

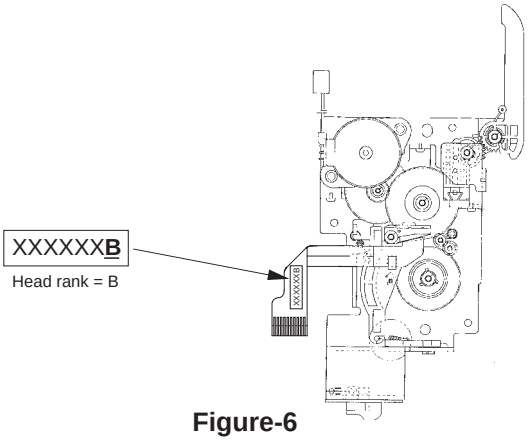


Figure-6

CIRCUIT DESCRIPTION

Setting the batteries or AC adaptor (see figure 7)

When setting the batteries or AC adaptor, the voltage VDD2 is always applied to RAM and CPU since Q6 and IC5 are turned on.

Power on sequence (see figure 7)

When the power switch is turned on, PON signal is being H (PON = VDD2). CPU knows to turn the power switch on, it provides H from VCON terminal to base of transistor Q4. Then both transistors Q4 and Q3 are turned on, the voltage VDD1 is applied to all devices.

Power off sequence (see figure 7)

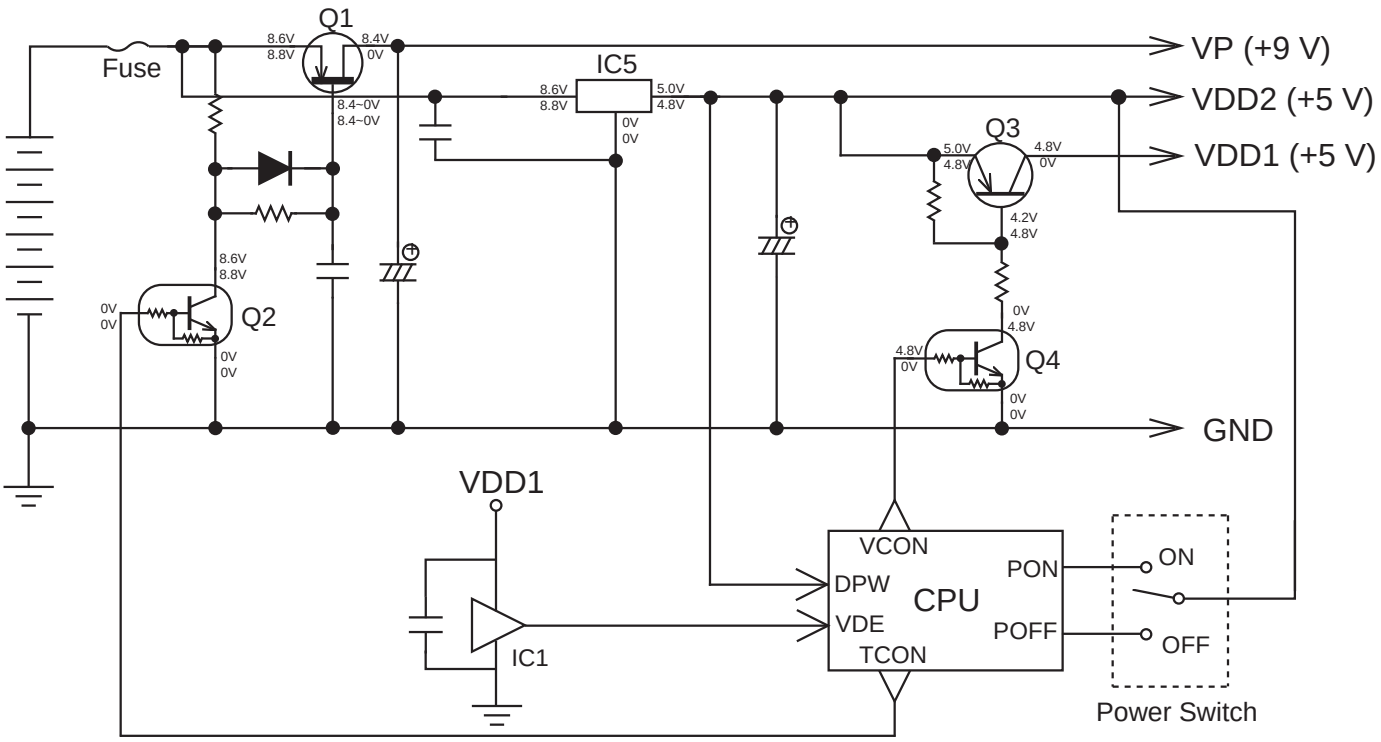
When the power switch is turned off, POFF signal is being H(POFF= VDD2). CPU knows to turn the power switch off, VCON signal and base of Q4 will be L. Then both transistors Q4 and Q3 are turned off, Q3 stops to supply the voltage VDD1.

Power down sequence (see figure 7)

If the voltage across the batteries lowers and the terminal DPW of CPU comes less than 4.5V, VCON signal is L. Then both transistors Q4 and Q3 are turned off, Q3 stops to provide the voltage VDD1.

Print sequence (see figure 7)

When the PRINT button is pressed, TCON signal is H. Then both transistors Q2 and Q1 are turned on, the voltage VP for printing will be 9V.



Note : The voltages around transistors mean as follows;
Upper figure : Power ON at no operation.
Lower figure : Power OFF.

Figure-7

LSI PIN FUNCTION

CPU (T6C37) : LSI1

No	Name	I / O	Function
1	RD	O	Read signal for memory devices
2	WR	O	Write signal for memory devices
3	VDD	I	+5V source
4~15, 17~21	A0~A11, EA12~EA16	O	Address bus
16	GND	I	Ground (0V) source
26	VDD	I	+5V source
27	RC1	O	Chip enable signal for ROM
29	RC3	O	Chip enable signal for RAM
31	RNK1	I	Thermal head rank setting
32	RNK2	I	Thermal head rank setting
33	PSTB	O	Strobe signal for thermal head
34	LTCH	O	Latch signal for thermal head
35	SO	O	Data
36	PCLK	O	Clock pulse for thermal head
37	VDD	I	+5V source
38	XIN	I	Main clock input
39	XOUT	O	Main clock output
40	GND	I	Ground (0V) source
41~44	MT1~MT2	O	Motor drive signal
45	TCON	O	Control signal for voltage VP
46~52	VCK0~VCK6	I	Voltage detecting signal for low battery
53	RSI	I	Reset delay input
54	RSO	O	Reset delay output
55	VDE	I	Reset signal input
56	VCON	O	Control signal for voltage VDD1
57	PON	I	Power on signal from power switch
58	POFF	I	Power off signal from power switch
59~66	KI0~KI7	I	Key input signal
67~75	KO0~KO8	O	Key common signal
79	DPW	I	Voltage detecting signal for forced power off
81	RX	---	Serial data input. Connected to VDD1
83~85	TAP1~TAP3	I	Tape cartridge selecting signal. Connected to GND
86	LCS	O	Chip enable signal for LCD driver
87	RSTL	O	Reset signal for LCD driver
88	CRES	I	Reset timing signal input. Connected to reset pad
89, 90	DSW, GND	---	Connected to GND
91	NBZ	O	Buzzer signal output
92	BZ	O	Buzzer signal output
93~100	CD0~CD7	I/O	Data bus

Table-1

LCD driver (HD44105H) : LSI201

No	Name	I / O	Function
1~12, 41~60	X1~X32	O	LCD drive output
13	DL	I / O	I/O pin for 2 way shift register and shift data
14	GND		Ground
15, 16	FS1, FS2	I	Select frequency
17~19	DS1~DS3	I	Select display duty
20	C		Oscillator
21	R		Oscillator
22	CR		Oscillator
23	STB	I	Input pin for test use
24	SHL	I	2 way shift register, select shift direction
25	M/S	I	Master/slave switching M/S=H : master mode M/S= L : slave mode
26, 27	ø1, ø2	O	Output pin to HD44102CH operation clock. The frequency is half the frequency of the oscillator.
28	FRM	O	Display synchronize signal (frame signal)
29	VCC		+5V source
30, 32, 35	NC		Not used
31	M	I/O	LCD drive alternating signal
33	CL	I/O	Shift register shift clock Output at master Input at slave
34	DR	I/O	I/O pin for 2 way shift register and shift data
36	VEE		Power source for LCD drive circuit. 0~+5.5V
37~40	V1~V4		LCD drive level power V1, V2 : Selecting level V3, V4 : No selecting level

Table-2

LCD driver (HD44102CH) : LSI202

No	Name	I / O	Function
1~22, 24~40, 70~80	Y1~Y50	O	LCD drive output signal
23, 62	NC		Not used
41	VCC	I	+5V source
42	BS	I	Bus select BS=L : DB0~DB7 work at 8-bit BS=H : DB4~DB7 are only active a 4-bit. 8-bit data is split in two and accessed in order.
43	RST	I	Reset signal. Set RST signal to low level and display is turned off.
44~46	CS1~CS3	I	Chip select
47	E	I	Enable R/W=L : latches E fall DB0~DB7 R/W=H : E=H sends data to DB0~DB7
48	R/W	I	Read/Write R/W=H : Sends data to DB0~DB7 when E=H, CS2, 3=H R/W=L : Receive from DB0~DB7 when CS2,3=H or CS1=H
49	D/I	I	Data/Instruction D/I=H : Indicates that DB0~DB7 data is display data D/I=L : Indicates that DB0~DB7 data is display control data
50~57	DB0~DB7	I/O	Data bus
58	FRM	I	Display synchronize signal (frame signal) When FRM=H, the 5-bit display line counter is reset, and synchronizes the common signal and frame timing.
59	CL	I	Display synchronize signal. Synchronizes with the rise of the CL signal, and sends the liquid crystal signal for the display data.
60, 61	ø1, ø2		2 phase clock for internal operation
63	M	I	Alternating signal for LCD drive output
64	GND		Ground source
65	VEE		Power source for LCD. 0~+5V.
66~69	V1~V4		Level power for LCD drive. V1 / V2 : Selecting level. V3 / V4 : No selecting level.

Table-3

DIAGNOSTIC PROGRAM

Note : Make the reset operation after RAM check, because the RAM check break the data stored in RAM.

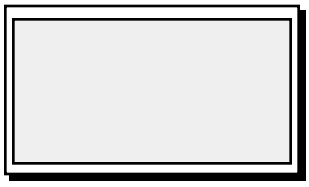
Check item	Operation	Display	Note
(BOOT)	Press ON while pressing keys, SET + RETURN + FUNCTION	0 ALL 7 VP 1 RAM 2 LCD 3 KEY 4 SW 5 PR1 6 PR2	Main menu
RAM CHECK (1 RAM)	1		Beep
	(After a few seconds)	RAM 64KOK ROM 1MOK XXXX	To return the main menu, press any key.
LCD CHECK (2 LCD)	2		Frame
	Any key		All dots
	Any key		Checker
	Any key		Reversed checker

Table-4(1/2)

Check item	Operation	Display	Note
KEY CHECK (3 KEY)	[3]	1	Press the key according to what is appeared on the LCD. Press any key after last key check to return the main menu.
RANK CHECK (4 SW)	[4]	RANK X	Check the rank of the thermal head employed in the unit. (RANK = A ~ D)
PRINT CHECK-1 (5 PR1)	[5]	NOW PRINTING	Refer to the following figure-7.
PRINT CHECK-2 (6 PR2)	[6]	NOW PRINTING	Refer to the following figure-8.
VP CHECK (7 VP)	[7]	Vp ON	TCON signal from CPU is H, voltage VP is applied to the thermal head and stepping motor.
ALL ITEM CHECK (0 ALL)	[0]		The 5 check items are proceeded automatically by pressing any key, according to the following order. RAM—LCD—KEY—SW—PR1

Table-4(2/2)

PR-1 (Normal printing result)

Figure-8

PR-2 (Normal printing result)

Figure-9

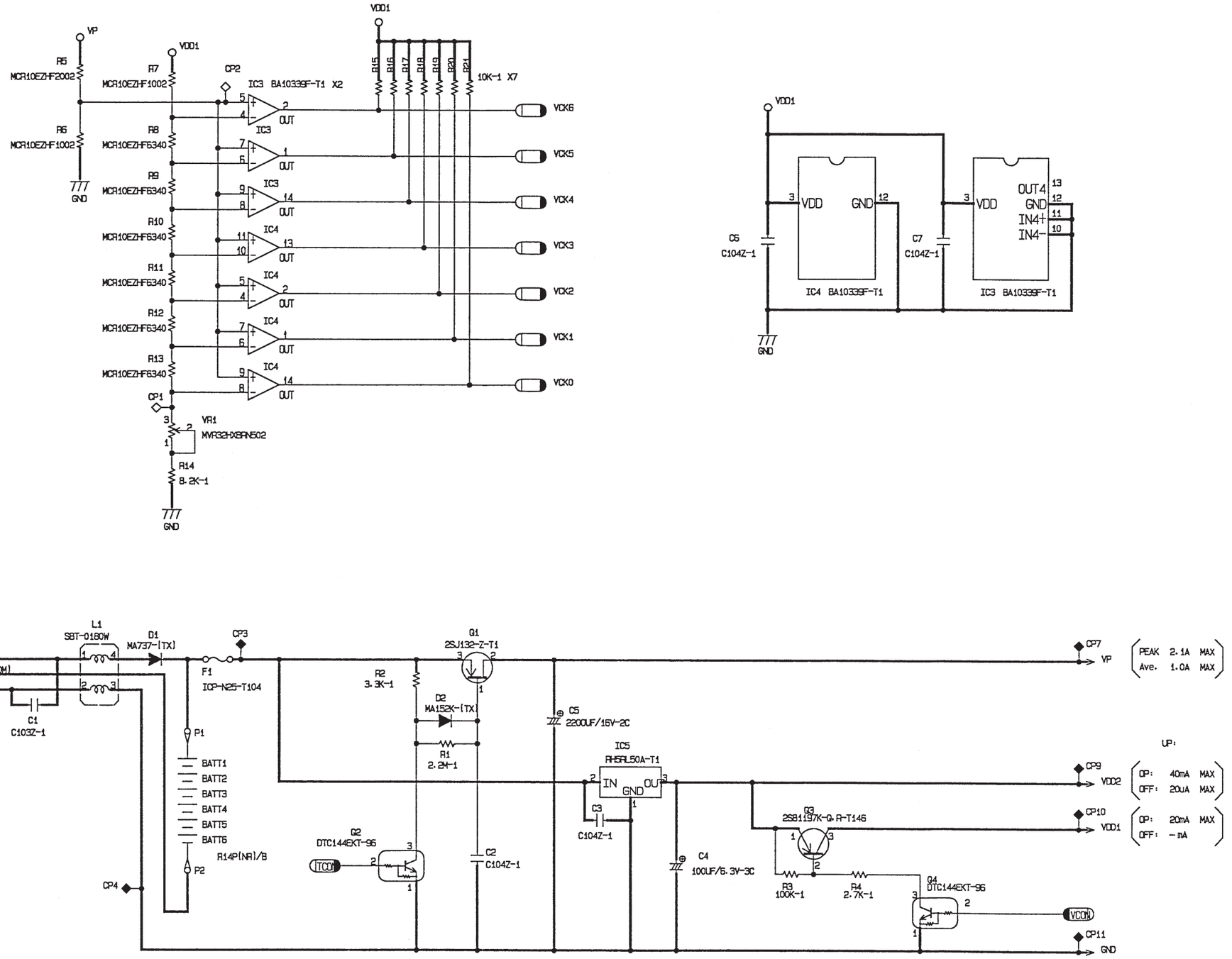
MESSAGES

Message	Meaning	Action
NO DATA!	There is no data stored in memory.	Store some data before trying to perform this operation.
NOT ENOUGH MEMORY!	There is not enough unused memory to perform the operation.	Reduce the size of the data you are trying to store or delete data already stored to make room for the new data.
NOW PRINTING	Printer is performing printing operation.	Wait for printing operation to end.
NOW PRINTING CUT THEN [SET]!	Printing is paused for a tape cut operation.	Cut the tape and then press SET to resume printing.
SAME NAME ALREADY USED!	The name you are using when storing data in memory is already used.	Use a different name or delete the data in memory this is under the same name.
TEXT DOES NOT FIT!	Text is too long to fit in the specified tape length.	Reduce the size of the characters or shorten the text.
TOO MANY LINES!	Text has too many lines to fit on tape.	Reduce the number of lines.
TOO MANY LINES TO FRAME!	Text has too many lines to fit into a frame.	Reduce the number of lines.
WHERE?	Unit is asking for the starting point of the operation you are performing.	Use ◄ and ► to move the cursor to the starting point and press SET to specify it.
CANNOT COMBINE!	Previously input text cannot be combined with new input text.	Perform the operation and input new text.
CANNOT USE 6 mm	Current operation cannot be performed using 6 mm tape.	Change to a different tape size.
CLEARS INPUT TEXT!	The operation you have selected will clear the text you previously input.	Proceed with the operation (and clear the text), or press ESC to abort without clearing anything.
DATA ERROR! RESET!	Memory data has become corrupted for some reason.	Reset the unit. Note that the reset operation deletes all data in memory.
INITIAL?	Memory initialization is required.	Initialize memory.
INPUT TEXT!	Unit is requesting input of text.	Input the text you want to print.
LOW BATTERY	Battery power is low.	Replace batteries or use AC adaptor.
MEMORY FULL!	Memory is full and data cannot be stored.	Delete data you no longer need and make room for new data.

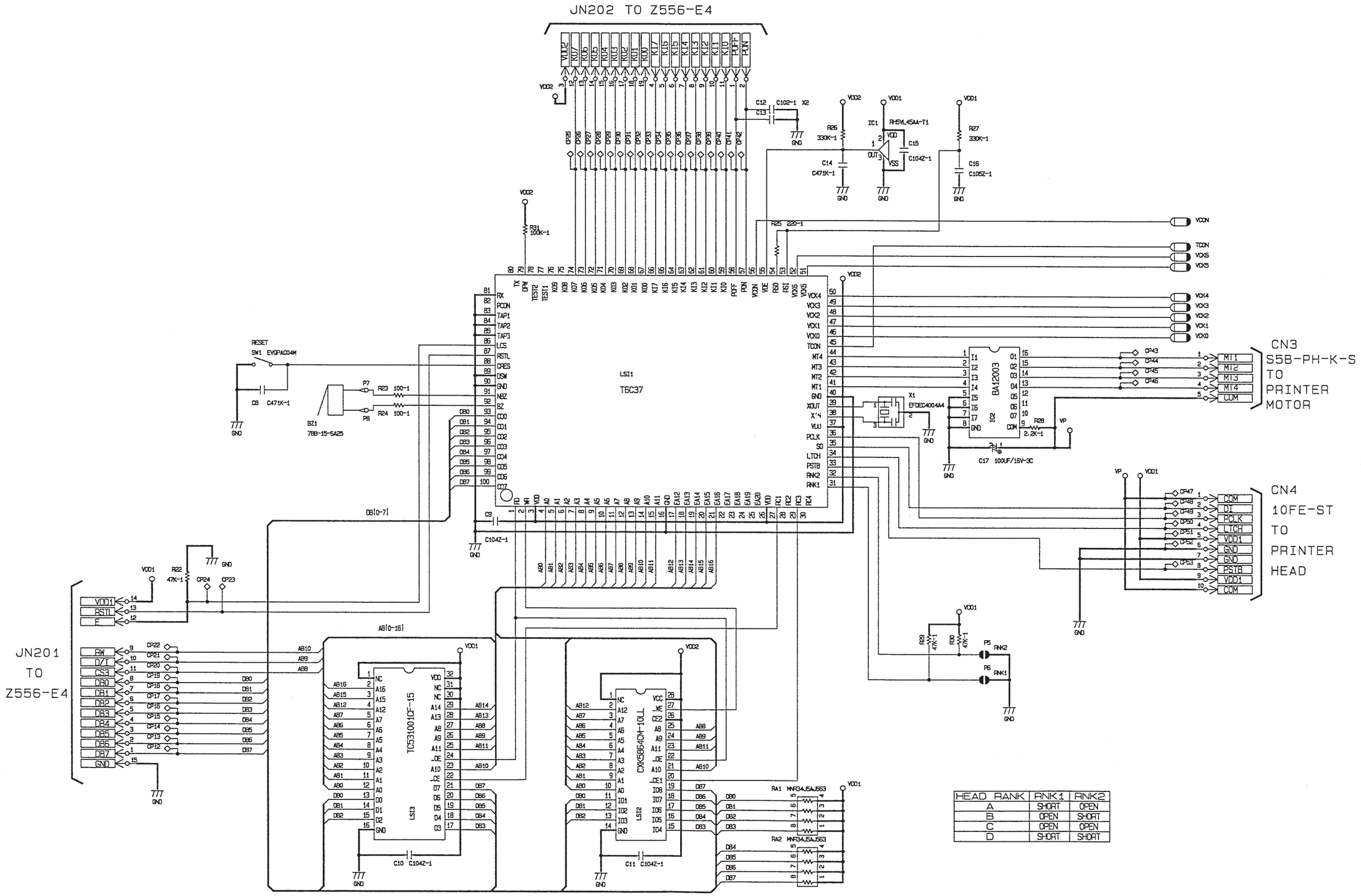
Table-5

SCHEMATIC DIAGRAM

PCB Z556-1 (1/2)

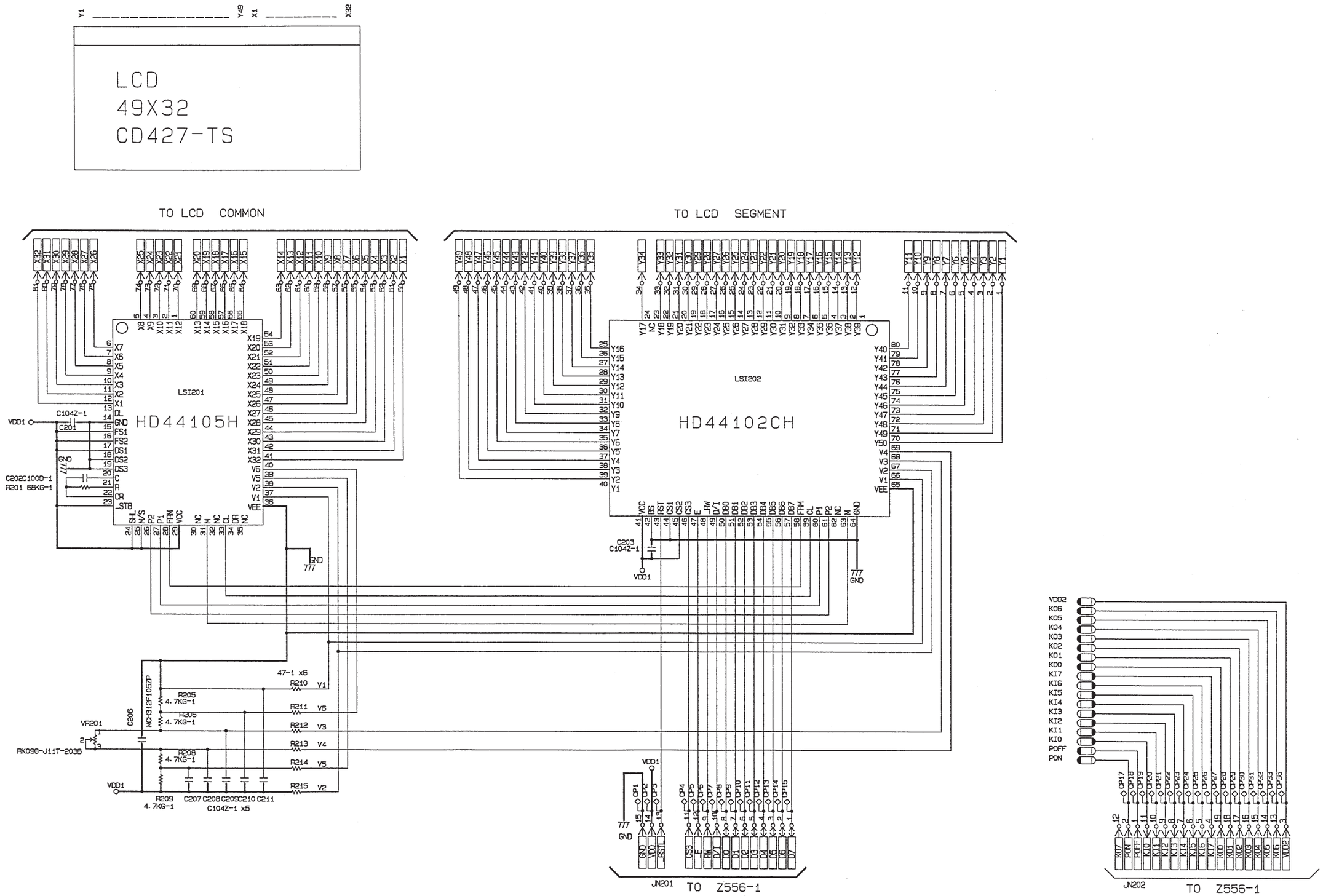


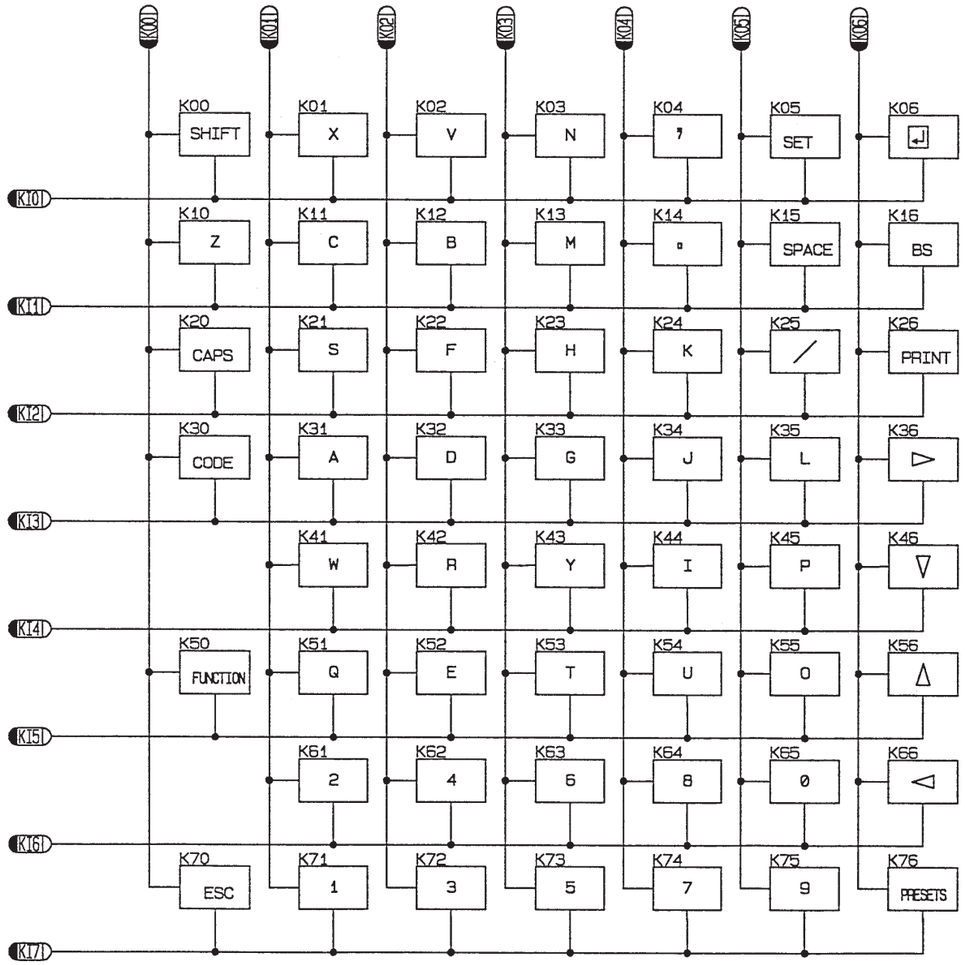
PCB Z556-1 (2/2)

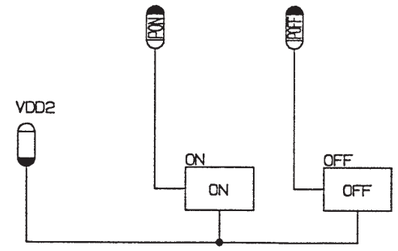


HEAD RANK	RNK1	RNK2
A	SHORT	OPEN
B	OPEN	SHORT
C	OPEN	OPEN
D	SHORT	SHORT

PCB Z-556-E4 (1/2)




K00
K01
K02
K03
K04
K05
K06
K10
K11
K12
K13
K14
K15
K16
K17
K00 SHIFT
K01 X
K02 V
K03 N
K04 ,
K05 SET
K06 ↵
K10 Z
K11 C
K12 B
K13 M
K14 .
K15 SPACE
K16 BS
K20 CAPS
K21 S
K22 F
K23 H
K24 K
K25 /
K26 PRINT
K30 CODE
K31 A
K32 D
K33 G
K34 J
K35 L
K36 ▷
K41 W
K42 R
K43 Y
K44 I
K45 P
K46 ▽
K50 FUNCTION
K51 Q
K52 E
K53 T
K54 U
K55 O
K56 △
K61 2
K62 4
K63 6
K64 8
K65 0
K66 ◁
K70 ESC
K71 1
K72 3
K73 5
K74 7
K75 9
K76 PRESETS


VDD2
KON
KOFF
ON
OFF
ON
OFF

PARTS LIST

N	Item	Code No.	Parts Name	Specification	Q	M	FOB Japan N.R.Yen Unit Price	R
		Z556-1 PCB ASS'Y						
	LSI1	2011 9527	LSI	T6C37	1	1		A
N	LSI3	2012 0476	LSI	HN62321AFRM2	1	1		A
	LSI2	2011 9520	LSI	CXK5864CM-10LL	1	1		A
	IC2	2114 2436	Monolithic IC	BA12003	1	5		B
	X1	2590 1435	Ceramic oscillator	EFOEC4004A4	1	10		C
N	C5	2803 7821	Electrolytic capacitor	RE3-16V222M-T2	1	5		C
N	C4	2803 7807	Electrolytic capacitor	ECEA0JKA101B	1	20		C
	C17	2807 2707	Electrolytic capacitor	RE3-16V101M-T2	1	20		C
	J1	3501 5103	AC power jack	HEC3110-01-010	1	10		C
	CN3	3501 6307	connector	S5B-PH-K-S	1	20		C
	CN4	3501 7770	connector	10FE-ST	1	10		C
	L1	3013 0602	Inductor	SBT-0180W	1	5		C
N	SW1	3412 1449	Switch	EVQ PAC 04M	1	20		C
	F1	2114 3227	IC protector	ICP-N25-T104	1	10		B
	IC3,IC4	2116 0056	Comparator	BA10339F	2	10		B
	IC1	2105 2331	Detector	S-80745AN-D9-T1	1	5		B
	IC5	2105 2702	Regulator	S-81250PG-PD-T1	1	10		A
	Q1	2254 0119	FET	2SJ132-Z	1	5		B
N	Q3	2259 1827	Chip transistor	2SB1197K-Q, R-T146	1	20		B
	Q2,Q4	2259 0889	Chip digital transistor	DTC144EKT-96	2	20		B
	D2	2390 1442	Chip diode	MA152K-(TX)	1	20		C
	D1	2390 1827	Chip diode	MA737-(TX)	1	10		C
	C12,C13	2845 2030	Chip capacitor	MCH215C102KK	2	20		C
	C1	2981 0168	Chip capacitor	MCH215C103KK	1	20		C
	C8,C14	2845 2289	Chip capacitor	MCH215C471KK	2	20		C
	C2,C3,C6,C7, C9~C11,C15	2845 1540	Chip capacitor	MCH212F104ZK	8	20		C
	C16	2845 1925	Chip capacitor	MCH312F105ZP	1	10		C
	R23,R24	2792 0217	Chip resistor	MCR10EZHJ101	2	20		C
	R25	2792 0815	Chip resistor	MCR10EZHJ221	1	20		C
	R14	2792 0960	Chip resistor	MCR10EZHJ822	1	20		C
	R15~R21	2792 0831	Chip resistor	MCR10EZHJ103	7	20		C
	R28	2792 1051	Chip resistor	MCR10EZHJ222	1	20		C
	R4	2730 0530	Chip resistor	MCR10EZHJ272	1	20		C
	R2	2792 0942	Chip resistor	MCR10EZHJ332	1	20		C
	R22,R29,R30	2792 0462	Chip resistor	MCR10EZHJ473	3	20		C
	R3,R31	2792 0209	Chip resistor	MCR10EZHJ104	2	20		C
	R26,R27	2792 0888	Chip resistor	MCR10EZHJ334	2	20		C
	R1	2730 0549	Chip resistor	MCR10EZHJ225	1	20		C
N	R8~R13	2795 4613	Chip resistor	MCR10EZHF6340	6	20		C
N	R5	2795 4606	Chip resistor	MCR10EZHF2002	1	20		C
	R6,R7	2795 1190	Chip resistor	MCR10EZHF1002	2	20		C
	RA1,RA2	2775 1372	Chip network resistor	MNR34J5AJ563	2	20		C
	VR1	2795 4620	Chip volume	MVR32HXBRN502	1	20		C
		Z556-E4 PCB ASS'Y						
	LSI202	2001 7295	LSI	HD44102CH	1	1		B
	LSI201	2001 7287	LSI	HD44105H	1	1		B
	LCD	3335 5502	LCD	CD427-TS	1	1		B
	VR201	2765 0798	Volume	RK09G-J11T-203B	1	1		C
	R210~R215	2792 0807	Chip resistor	MCR10EZHJ470	6	20		C

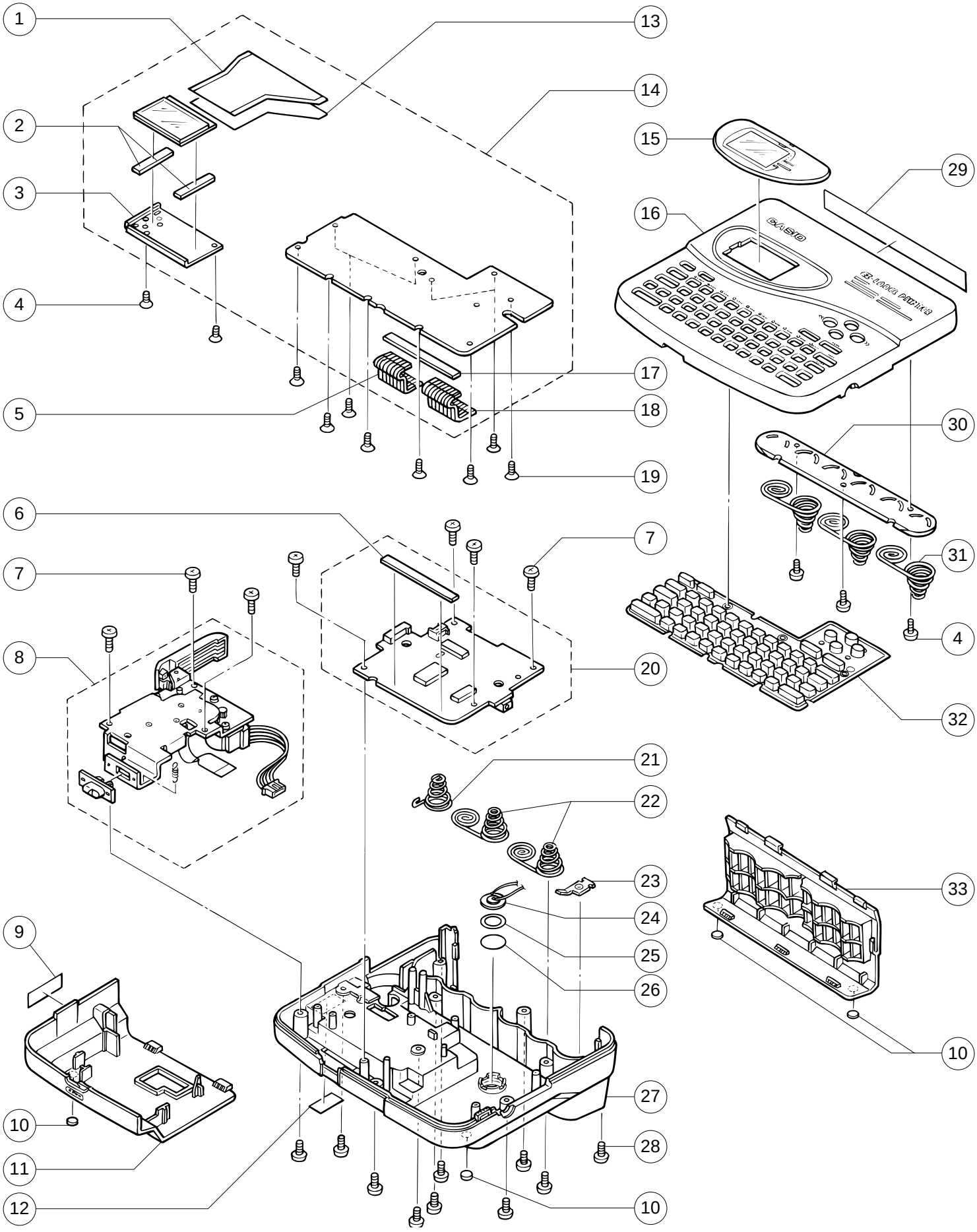
Notes: N – New parts
M – Minimum order/supply quantity
R – Rank
Q – Quantity used per unit

R – A : Essential
B : Stock recommended
C : Others
X : No stock recommended

N	Item	Code No.	Parts Name	Specification	Q	M	FOB Japan N.R.Yen Unit Price	R
	R205,R206, R208,R209	2796 0581	Chip resistor	MCR10EZHG472	4	20		C
	R201	2795 0826	Chip resistor	MCR10EZHG683	1	20		C
	C206	2845 1925	Chip capacitor	MCH312F105ZP	1	10		C
	C202	2845 2212	Chip capacitor	MCH215A100DK	1	20		C
	C201,C203, C207~C211	2845 1540	Chip capacitor	MCH212F104ZK	7	20		X
N	1	5610 8310	Heat seal Z556	A340153-1	1	1		B
N	2	6405 5680	W tape L272	A413318-1	2	20		X
N	3	6413 5490	Center plate Z556	A340127-1	1	10		X
N	5	6413 5530	PC joiner A-Z556	A440324-1	1	10		C
N	13	6413 5520	Tape Z556	A440317-1	1	20		B
	17	6401 9940	W tape L245	A412640-1	1	20		X
N	18	6413 5610	PC joiner B-Z556	A440324-2	1	10		C
		COMPONENT						
	4	6329 1680	Screw A-G320	A44793-11	5	20		X
	6	6401 9940	W tape L245	A412640-1	1	20		X
	7	5111 2172	Screw	2.3X6 ZMC-3	7	20		X
N	8	6405 5310	Chassis ass'y	A110673*6	1	1		C
N	9	6413 5510	Label A-Z556	A413317-5	1	20		X
	10	6396 1960	Rubber foot L121	A411855-1	4	20		X
N	11	6413 5441	Cassette cover Z556	A211067-5	1	5		C
	12	6401 9780	Label C-L245	A412596-2	1	20		X
N	14	6413 5350	Z556-E4 ass'y	A140060*1	1	1		X
N	15	6413 5480	Display plate Z556	A340125-1	1	10		X
N	16	6413 5430	Upper case Z556	A110677-2	1	1		X
N	19	6386 9510	Screw A-V426	A310044-3	10	20		X
N	20	6413 5400	Z556-1 ass'y	A240090*1	1	1		C
N	21	6405 5740	Battery spring C-L272	A413346-1	1	20		X
N	22	6405 5730	Battery spring B-L272	A413325-1	2	10		X
	23	6405 5710	Battery spring L272	A413323-1	1	20		X
	24	3122 1876	Buzzer	7BB-15-6A25	1	10		X
	25	6388 8240	W tape A-V164	A410562-1	1	20		X
	26	6400 9560	Spacer A-L240	A412410-1	1	20		X
	27	6413 5422	Lowe case Z556AAL	A110676B-5	1	1		X
	28	5041 2318	Screw	2.3 X 6 B	10	20		X
N	29	6413 5500	Label B-Z556	A413316-5	1	20		X
N	30	6413 5460	Battery spring holder Z556	A211069-5	1	10		X
	31	6405 5720	Battery spring A-L272	A413324-1	3	20		X
N	32	6413 5470	Rubber key Z556	A211077-2	1	1		X
N	33	6413 5450	Battery cover Z556	A211068-5	1	5		C
		6402 9720	FCC label L387	A412826-1	1	20		X

Notes:
N – New parts
M – Minimum order/supply quantity
R – Rank
Q – Quantity used per unit

R – A : Essential
B : Stock recommended
C : Others
X : No stock recommended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N	Item	Code No.	Parts Name	Specification	Q	M	FOB Japan N.R.Yen Unit Price	R
		CHASSIS ASS'Y						
N	2	6405 5500	Head arm L727	A211065-1	1	10	36	X
N	4	6405 5550	Cutter shaft B-L272	A312679-1	1	10	28	X
N	5	6405 5570	Cutter gear L272	A312682-1	1	20	21	X
	7	6400 9770	Cutter lever spring L240	A412365-1	1	20	13	X
N	9	6405 6230	Switch spring L272	A413707-1	1	20	24	X
N	11	6405 5700	Head spring A-L272	A413321-1	1	20	6	X
N	13	6405 2700	Gear B-L244	A312674-1	1	10	26	X
	14	6400 9640	Clutch plate L240	A311853-1	1	20	19	X
	15	6400 9650	Winder top L240	A311854-1	1	20	19	X
	16	6400 9710	Clutch felt L240	A412350-1	1	20	5	X
	17	6400 9720	Spring washer L240	A412351-1	1	20	3	X
	18	6400 9730	Clutch spring L240	A412352-1	1	20	7	X
	19	6405 2850	W tape L244	A413501-1	1	20	4	X
	20	6400 9750	Cut washer B-L240	A412353-2	5	20	2	X
	21	6400 9760	Cut washer C-L240	A412353-3	1	20	3	X
	22	1909 1944	Screw	M3 X 5 ZMC-3	2	20	3	X
N	26	1013 8654	Thermal head	KV6420-11	1	1	710	B
	27	3222 0049	Stepping motor	27S1N18ECNU	1	1	520	X
	35	6406 7280	Head spring C-L275	A413899-1	1	20	15	X
N	41	6413 5640	Cutter holder Z556	A211066-5	1	10	27	X
N	42	6413 5650	Cutter lever Z556	A312683-4	1	10	34	X
N	43	6413 5660	Switch knob Z556	A312684-5	1	10	26	X
N	45	6405 2500	Gear A-L244	A312673-1	1	20	22	X
N	46	6405 4670	Gear C-L244	A413627-1	2	20	10	X
	47	6400 9740	Cut washer A-L240	A412353-1	3	20	2	X
N	48	6405 5420	Platen L272	A312680-1	1	1	120	X

Notes: N – New parts
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R – A : Essential
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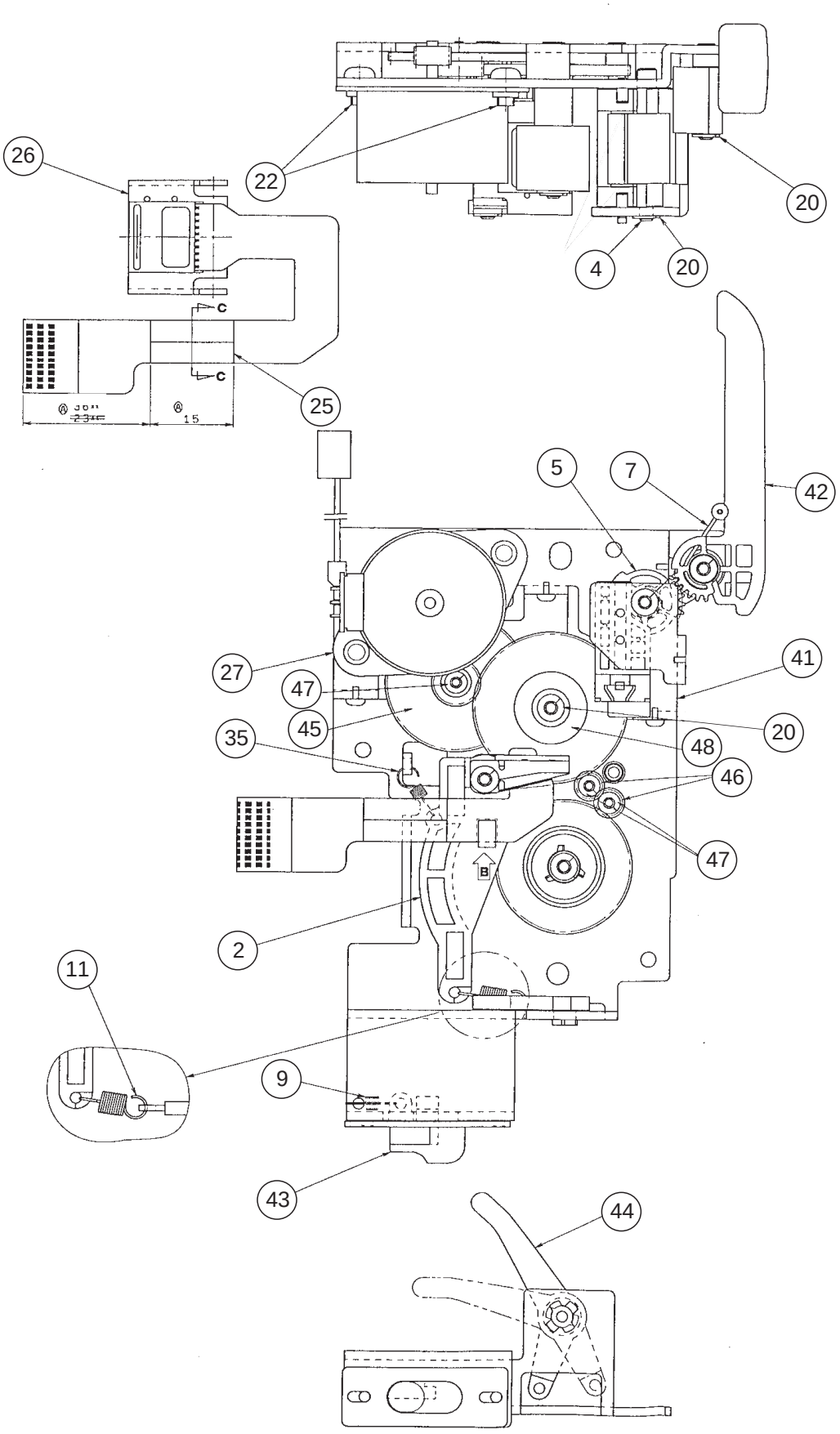
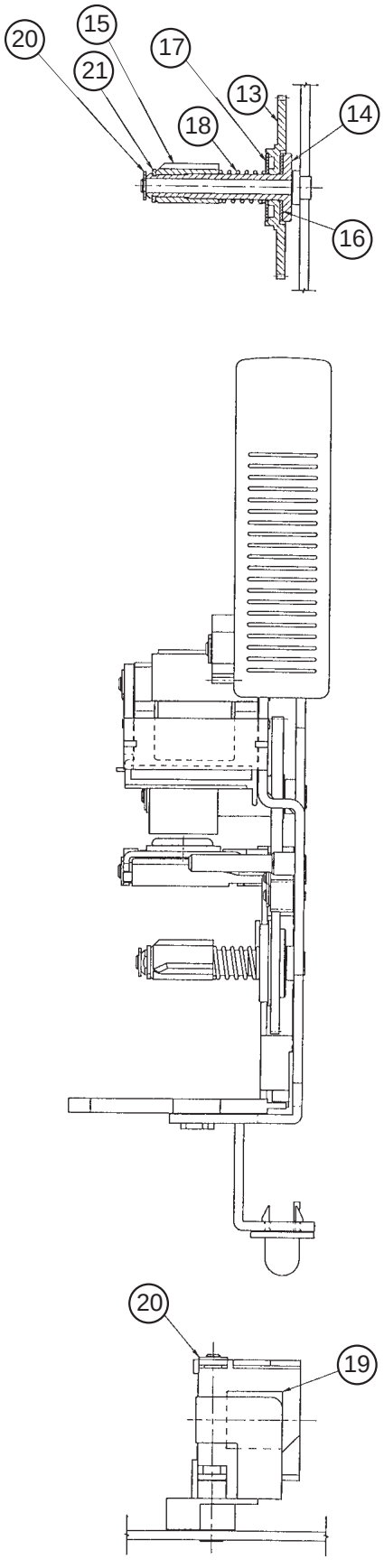
C : Others
X : No stock recommended

Chassis ass'y-1



Chassis ass'y-2



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